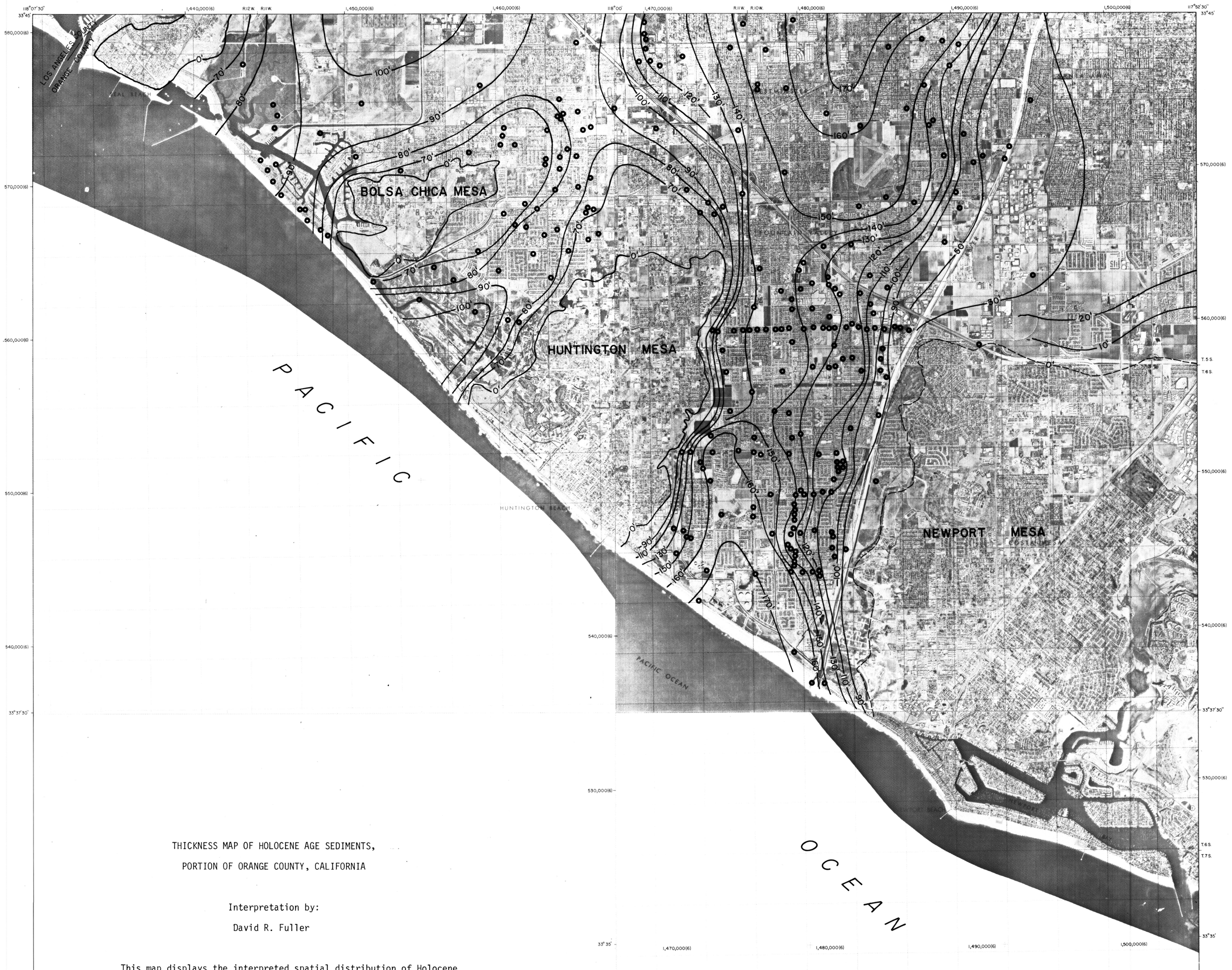
OPEN-FILE REPORT 81-966
O.F.R. 80-19 L.A.
ANNUAL TECHNICAL REPORT
F.Y. SEPT. 19, 1979 - SEPT. 18, 1980
PLATE NO. 3 MAP NO. 3

CALIFORNIA DIVISION OF MINES AND GEOLOGY
JAMES F. DAVIS, STATE GEOLOGIST

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF CONSERVATION

RESEARCH SPONSORED BY THE UNITED STATES GEOLOGICAL SURVEY,
DEPARTMENT OF INTERIOR, UNDER U.S.G.S. CONTRACT 14-08-0001-18241

PREPARED IN COOPERATION WITH THE COUNTY OF ORANGE, CALIFORNIA,
ENVIRONMENTAL MANAGEMENT AGENCY COOPERATIVE AGREEMENT NO.5-0052



THICKNESS MAP OF HOLOCENE AGE SEDIMENTS,

PORTION OF ORANGE COUNTY, CALIFORNIA

Interpretation by:

David R. Fuller

This map displays the interpreted spatial distribution of Holocene age sediments within a portion of the area of this investigation. Thickness of these sediments has been interpreted from available data, largely water well and investigative test boring lithology descriptions. The location of data points of control are shown on the map, but the data values have been omitted in order to achieve display clarity. The data values used in this interpretation have not been corrected for structural influences, however due to the relative flat-lying nature of these Holocene age sediments which have not been subjected to major structural deformation, the apparent total thickness values displayed on this map should approximate the true stratigraphic thickness values of the Holocene age sediments.

The purpose of this map is to provide a geometric definition of the youngest sediments which underlie the Coastal Plain. These unconsolidated to loosely consolidated Holocene age sediments are the measures which are the most susceptible to seismic deformation. The thickness and areal distribution of these sediments is one of the parameters which must be considered in estimating the primary and secondary effects resulting from earthquake-generated seismic waves which may impact this area.

BASE MAPS FROM U.S. GEOLOGICAL SURVEY MOSAICED ORTHOPHOTO 1:24,000 QUADRANGLES

CLASSIFICATION AND MAPPING OF QUATERNARY SEDIMENTARY DEPOSITS FOR PURPOSES OF SEISMIC ZONATION, SOUTH COASTAL LOS ANGELES BASIN, ORANGE COUNTY, CALIFORNIA

SECOND YEAR INTERIM REPORT

INVESTIGATORS: EDWARD C. SPROTTE, DAVID R. FULLER AND RICHARD B. GREENWOOD

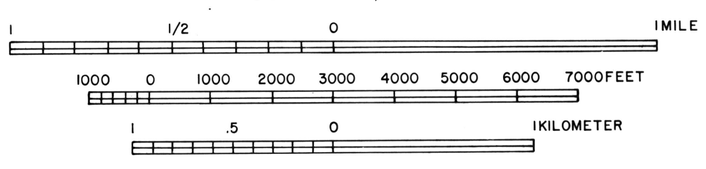
PERIOD ENDING SEPTEMBER 18, 1980.

THICKNESS MAP OF HOLOCENE AGE SEDIMENTS,
PORTION OF ORANGE COUNTY, CALIFORNIA

LEGEND

- 10' — Line of approximate equal thickness of Holocene sediments.
- ⊙ Point of subsurface control provided by a water well or an investigative boring.
- – – – – Limit of areal investigation, the approximate edge of Holocene sediments.
- — – — County boundary line.

SCALE 1:48,000



ORTHOPHOTO
INDEX MAP